

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Samy Ashkar

Serial No.: Divisional of 08/918,189      Art Unit: Not Yet Assigned

Filed: December 22, 2003      Examiner: Not Yet Assigned

For: *NOVEL OSTEOPONTIN DERIVED CHEMOTACTIC PEPTIDES AND METHODS OF USE*

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicant submits an Information Disclosure Statement, including five (5) pages of Form PTO-1449. All of the documents cited below were cited by or submitted to the Patent Office in Application Serial No. 08/918,189, filed August 21, 1997, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicants are not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission. However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

### U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
4,693,718	09-15-1987	Urry, et al.	623/11
4,976,734	12-11-1990	Urry, et al.	623/11
5,519,003	03-21-1996	Mochly-Rosen	514/16
5,773,569	06-30-1998	Wrighton, et al.	530/300
5,989,553	11-23-1999	Johnston	424/190.1

### Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
0 269 595	07-14-1993	Erlansen-Albertsson	EP

### Publications

BEHREND, et al., "Reduced malignancy of *ras*-transformed NIH 3T3 cells expressing antisense osteopontin RNA," *Cancer Res.* 54: 832-837 (1994).

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NASU, et al., "Expression of wild-type and mutated rabbit osteopontin in *Escherichia coli*, and their effects on adhesion and migration of P388D1 cells," *Biochem. J.* 307: 257-265 (1995).

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OLDBERG, et al., "Identification of a bone sialoprotein receptor in osteosarcoma cells," *J. Biol. Chem.* 263(36): 19433-19436 (1988).

PATARCA, et al., "Differential induction of interferon  $\gamma$  gene expression after activation of CD4+ T cells by conventional antigen and M1s superantigen," *Proc. Natl. Acad. Sci. USA* 88: 2736-2739 (1991).

PATARCA, et al., "Dysregulated expression of the T cell cytokine Eta-1 in CD4-8- lymphocytes during the development of murine autoimmune disease," *J. Exp. Med.* 172: 1177-1183 (1990).

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PATARCA, et al., "Structural and functional studies of the early T lymphocyte activation 1 (Eta-1) gene," *J. Exp. Med.* 170: 145-161 (1989).

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YUE, et al., "Osteopontin-stimulated vascular smooth muscle cell migration is mediated by  $\beta_3$  integrin," *Exp. Cell Res.* 214: 459-464 (1994).

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Filing Date	December 22, 2003		
First Named Inventor	Samy Ashkar		
Group Art Unit			
Examiner Name			
Attorney Docket Number	CMCC 512 DIV		
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## U.S. PATENT DOCUMENTS

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		PATARCA, et al., "Molecular and cellular basis of genetic resistance to bacterial infection: the role of the early T-lymphocyte activation-1/osteopontin gene," <i>Crit. Rev. Immunol.</i> 13(3-4): 225-246 (1993).		
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